HEALTH INDUSTRY PROFILE

I. INTRODUCTION

California has led the profound and rapid national transformation of health care financing and delivery systems since the 1970's. Although federal and state regulatory statutes facilitated some of the shift from traditional, fee-for-service indemnity insurance to pre-paid managed care coverage, economic conditions and competition have driven the movement toward more cost-conscious, rationalized care. This paper presents the historical context of managed care and highlights key indicators of its tremendous and varied growth; provides a brief overview of the regulatory context; defines major industry terms, structures, and players; and discusses industry trends. This analysis focuses on managed care in California but presents fee-for-service (FFS) and national information for context.

II. MANAGED CARE: ITS SOURCE AND GROWTH

In its broadest definition, managed care is characterized by selective provider contracting and a defined list of benefits. The industry defines two general managed care categories: health maintenance organizations (HMOs) and preferred provider insurance arrangements (PPIs), commonly referred to as "PPOs." While these two mature models of managed care are well established, many other innovative models are rapidly developing. California has one of the highest overall managed care penetration rates in the country[1] with nearly 14 million HMO enrollees in 1996[2]. Of those Californians who receive insurance through employment, 63% are enrolled in HMOs, 7% in POS plans, 23% in PPI plans and 7% in indemnity plans. Thus, in the private sector, the transformation to managed care is nearly complete.

A. Origins of Widespread Health Insurance

Although the antecedents to modern health insurance began in the nineteenth century, health insurance did not become a large-scale enterprise until World War II. During the war, when wages were frozen and employers sought ways to attract employees, the government permitted employer-paid health insurance to be excluded from the wage limits and the taxable incomes of employees, effectively subsidizing employer-purchased insurance. Union activity also encouraged the growth of employer-provided health insurance. As coverage by private sector employers proliferated, the government also became a purchaser for its employees (Federal Employees Health Benefits Program, 1960), senior citizens (Title XVIII of the Social Security Act, 1965), and meeting certain categories of "deserving poor" (aged, blind, disabled, families with dependent children) and poverty criteria (Title XIX of the Social Security Act, 1965).[3] From

[1] Various sources place California from first to fourth in the nation in managed care penetration.

[2] CAHMO, (now CAHPs) 1996 Enrollment Survey of Plans.

[3] As part of the coalition building to pass the federal Medicare and Medicaid Acts of 1965, the government agreed to the traditional fee-for-service insurance for both programs. The FFS provision, and associated cost increases, went unamended until the late 1980's.

1940 to 1970, the number of Americans covered for at least hospital expenses rose from approximately 12 million to 159 million.[4] Over this same time period the US population grew from approximately 132 million to approximately 203 million.[5]

B. Economics of Health Insurance

Widespread health insurance was welcomed by covered individuals, insurance companies, and providers. For covered individuals, insurance reduced the fiscal exposure of a serious medical incident. Insurers favored employer-sponsored coverage because the resulting grouping of employees resulted in broader distribution of risk. Finally, providers welcomed insurance coverage because it resulted in an increased likelihood that they would be paid.

From an economic perspective, however, insurance added complexity to a marketplace by distorting the fundamental laws of supply and demand. In the absence of health insurance, a patient would negotiate directly with the provider to determine the care plan, price and volume of services. In a "100% insured" situation, where the enrollee is not responsible for deductibles or copayments, he/she pays a fixed premium and then becomes insensitive to price and cost, distorting the "demand side" of the equation—the enrollee generally wants as much care as might help his/her condition even if its benefit does not outweigh the total cost of providing the care. This price insensitivity was further accelerated after World War II when employers routinely began to pay the premium on behalf of their employees, making the price of care very distant from the consumer.[6] To the insured fully employer-insured person, health care was perceived as "free," and any care expected to be helpful to their condition, regardless of its cost-effectiveness, was viewed as a right.

Payment through insurance also renders the provider (supply side) price insensitive to the cost of care. Because unmanaged insurance assures that most or all services will be reimbursed, the provider no longer has to negotiate directly with the patient, and the economic process of balancing marginal benefit and marginal cost is eliminated.[7]

Theoretically, insurers might negotiate with providers to bring supply and demand into as close a balance as possible. However, until the early 1970's a power and information imbalance across the health care industry resulted in inevitable market failure. Medical providers had almost exclusive control of most patient and industry information, and insurers and members remained largely dependent on providers' authority.[8] In addition, insurers had little motivation to negotiate,

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[4] HIAA Source Book of Health Insurance Data, 1992, Washington HIAA: 1992.

[5] Statistical Abstract of the United States, 1996. Over this 30 year span, coverage percentages rose from approximately 9% to approximately 78%.

[6] Consumers' premiums essentially reflect the average usage from the prior year's risk pool, plus factors for inflation, overhead, profit and expected utilization.

[7] Victor Fuchs describes the fundamental economics of health care supply and demand in health care in The Health Economy, Cambridge: Harvard University Press, 1986.

[8] Because insured patients had complete free choice of providers and insurance companies were not allowed to discriminate among providers, insurers had no bargaining power over them. All insurers could do was tinker with coverage ("plan design") and pay the bills.

because they were able to pass cost increases through to employers. Employers were not very concerned with health cost increases, particularly because health benefits enjoyed tax-favored status and health care costs remained relatively low.

C. The Fee-for-Service Era

Prior to the 1970's, virtually all health insurance was based on the "fee for service" (FFS) approach, which basically operated as a "cost-reimbursement" model under which providers were compensated based upon services delivered. Under a FFS arrangement, expenditures increase if: 1) the fees themselves increase, 2) more units of service are charged, or 3) more expensive services are substituted for less expensive ones. Most health care providers did not substantially coordinate care with other providers, leading to "silos" of care. Providers were free –and encouraged by their training and societal norms -- to determine treatment levels and standards of care without economic restraint. The FFS arrangement enabled providers to pass cost increases and "marginal" procedures and tests through to price insensitive purchasers.

Two main types of health insurance characterized the FFS era. Commercial insurance companies offered "indemnity" and "major medical insurance". The more common indemnity insurance was modeled after casualty insurance, had no contractual link to providers, and based fee schedules on "usual, customary, and reasonable fees". Under an indemnity plan, the insured party customarily contributed "coinsurance" representing a portion of the cost of services received in addition to a monthly or annual premium. Major medical insurance was frequently purchased as an "add-on" and typically covered most or all costs after a patient's out-of-pocket expenses reached a certain limit.

The other insurance providers active during this period were the large, provider-sponsored nonprofit Blue Cross and Blue Shield plans that were unified through the National Blue Cross and Blue Shield Association (the "Blues") and offered "service benefit" insurance. Regional Blue Cross plans contracted with hospitals, and Blue Shield contracted with physicians. Both insurance entities negotiated favorable reimbursement arrangements and enrolled as many providers as possible. The Blues maintained provider bargaining power against other insurance companies, making it easier for hospitals and physicians to maintain leverage with commercial insurers because they had the guaranteed cash flow of the Blues as an alternative. The Blues essentially made it impossible for commercial insurers to contract with providers selectively and to create the beginnings of competition on quality and price.[9]

In addition to fighting to maintain "free choice of provider" for patients, which made payer price negotiation with providers impossible, the provider community dominated and shaped most industry structures of the FFS era. Providers determined patients' treatment options without oversight from insurers, quality assurance mechanisms or utilization review. Physicians predominantly operated solo practices or were affiliated with academic medical centers and had little interaction with insurers; referrals were generated through professional relationships and reputation. External measures or comparisons of "quality" were not formalized and published,

[9] The Blues used the publicly argument of enrollee "freedom of choice" of providers to justify their insistence on no selective provider insurance.

and physicians had no incentive to publish complaint or malpractice information for consumer comparison.

Despite the fact that the Blues had tremendous power in determining the costs and type of health care delivered during this time period, a few alternative organizational models had begun to provide health care with an empasis on cost-effectiveness by the early 1970's. These organizations, known as prepaid group practices ("PGPs") sought to band physicians together to provide coordinated care at a discounted, prepaid amount for individuals or employer groups who were willing to contract exclusively with them. The original HMO had its origins in the 1930's in medical care programs designed to care for workers in Henry J. Kaiser's industrial enterprises. This HMO and another early PGP plan combined multi-specialty group practice, per-capita prepayment, voluntary enrollment and physician responsibility for the management of care. The PGP concept became more popular as health care inflation continued to rise. Independent practice associations (IPAs) emerged in the late 1960's to compete against PGPs, which were beginning to capture significant business in select markets because of their cost-effectiveness and comprehensive coverage. (The characteristics of Group, IPA and other health maintenance organization plans are discussed in greater detail below.)

D. The Rise of Managed Care

By 1970 expanding health care costs had become a national concern for employers, the government, and health care economists. Experts worried that if trends continued unabated, the national economy would suffer. In 1970, Dr. Paul Ellwood coined the term health maintenance organization, or "HMO" as part of his vision of a national strategy to solve America's problems of uncontrolled health care expenditure growth, fragmentation and lack of accountability. The cornerstone of the strategy was the creation and fostering of competition among a group of HMOs, which he conceived of as non-governmental, comprehensive care organizations. These organizations would control spiraling health care costs through a range of management tools and techniques, from emphasizing prevention and health promotion to coordinating the activities of a range of health care providers to managing utilization of diagnostic tests, specialists and hospital beds. At a more conceptual level, the contrast between medicine practiced under a fee for service system and health care provided under an HMO would be a shift in the focus of the health care delivery system from episodic care for an individual to comprehensive management of the health of a population.

In 1973, as a reflection of growing interests and trends in HMOs, Congress passed the HMO Act which: (1) defined HMOs as being either the group practice or the individual practice variety; (2) provided grants and loans to help start non-profit HMOs; (3) required that all employers with 25 or more employees that offered traditional insurance to offer employees the choice of one group practice and one individual practice HMO as alternatives to traditional health insurance if such HMOs served the areas where their employees lived and requested inclusion; and (4) over-ruled state laws that inhibited HMO growth The Act passed despite the powerful opposing interests of such groups as the Blues and the American Medical Association.

Although HMOs grew in number and power after 1973, traditional FFS still dominated the landscape and health care costs continued to dramatically outpace inflation. Seeking to bring escalating health care costs under control, some employers proposed to continue to offer employees the traditional FFS coverage but to do so with selective provider contracting. Under

this modified FFS scheme, employees would be encouraged to accept the narrower physician panel through financial incentives. Employers would be able to create economies by negotiating prices and utilization controls (discussed more below) with providers. But until 1982, compliance with the principles of "guild free choice" advocated by the Blues and medical associations precluded development of this kind of insurance in most states. In 1982, in a major legislative battle in California, employers, insurers and labor unions teamed up to defeat the California Medical Association and secure the enactment of new legislation (AB799 and AB3480) permitting Medi-Cal and private insurers to contract selectively and pass the savings on to the purchasers. Most other states followed. This legislation authorized Preferred Provider Insurance (PPI), the other main form of managed care. While both of these laws were critical to the initial development of managed care, economic and competitive developments have been the primary driver of its growth.

It was not until the late 1980's that the cost pressures on employers and government really forced a proliferation of managed care across the nation. Figure 1 identifies the steady increase in the percentage of domestic product spent on health care and illustrates why health care has become such a crucial area for reform and Figure 2 compares per capita health spending for California and US from 1984 to 1994. California fell below the national average in per capita spending on health in 1993 due to a lower rate of cost increase, which was at least partially attributable to higher managed care penetration level.

Figure 1: National Health Expenditures as a Percent of the Gross Domestic Product

	1960	1970	1980	1990	1991	1992	1993	1994	1995
NHE as %GDP	5.1%	7.1%	8.9%	12.1%	12.9%	13.4%	13.6%	13.5%	13.6%
Avg Ann %Chg NHE	–	10.5%	13.0%	10.3%	10.1%	9.5%	6.3%	5.2%	6.1%
GDP ($ Billion)	$527	$1,036	$2,784	$5,744	$5,917	$6,244	$6,553	$6,936	$7,254
Avg Ann %Chg GDP	–	7.0%	10.4%	6.6%	3.0%	5.5%	4.9%	5.8%	4.6%

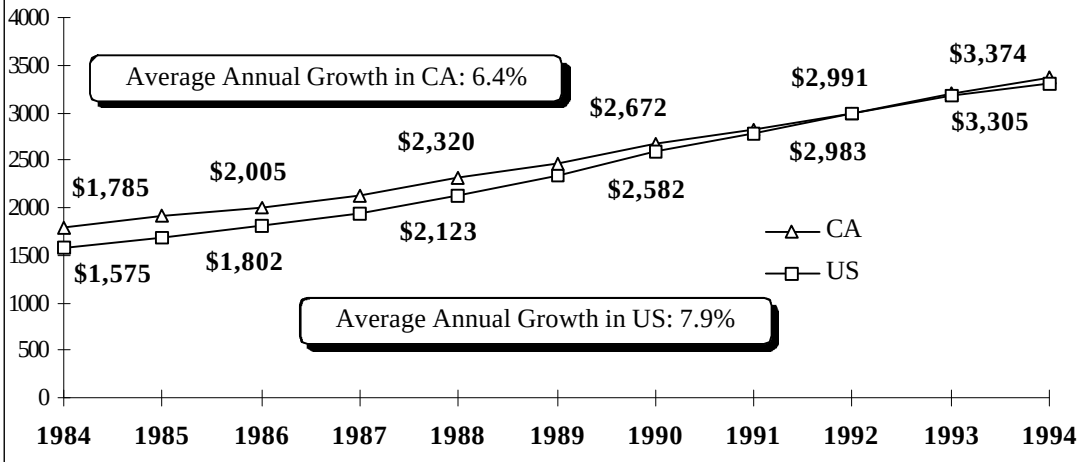
Source: HCFA Office of the Actuary: Data from Office of National Health Statistics

III. REGULATORY OVERVIEW OF HEALTH CARE

This brief review of the evolution of managed care illustrates that while legislation created opportunities for a broadening of the health care market, health care cost inflation and economic and competitive conditions have prompted the subsequent increase in managed care penetration. As managed care has expanded and become a fact of life for a large percentage of the population, regulatory interest and activity has intensified.

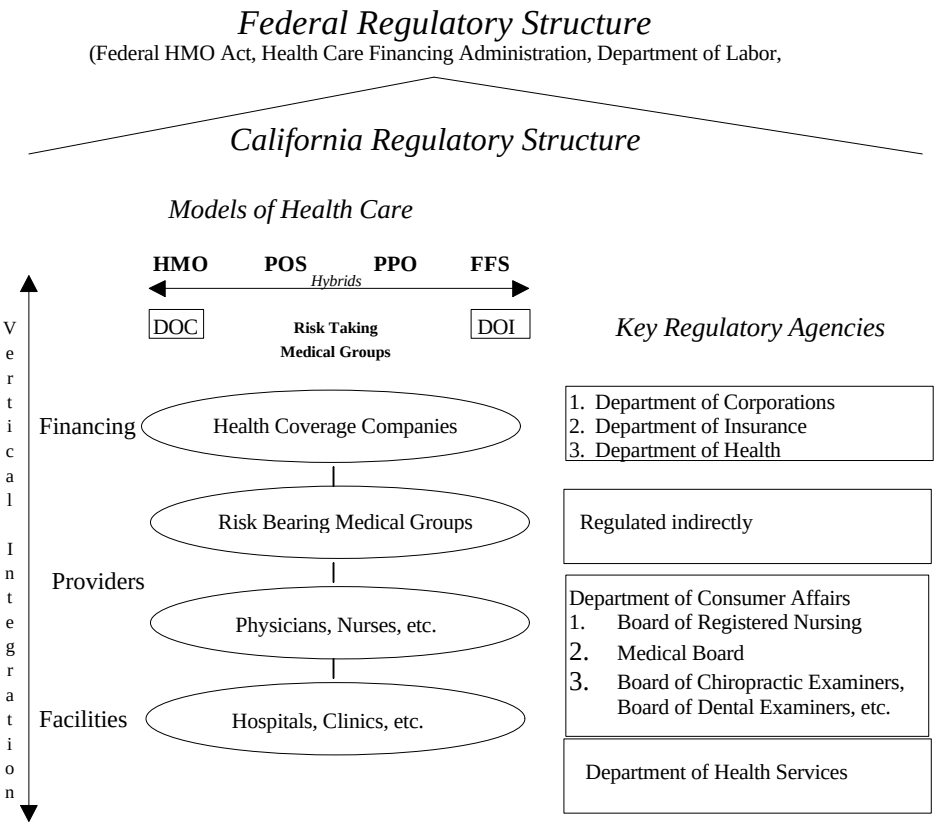
Following is a schematic overview of health care's regulatory environment, which illustrates the regulatory complexity of the industry. Much of the regulation of health care reflects either the uncoordinated nature of legislation from different eras or the uncoordinated manner in which recent laws have been passed. A more in-depth description of both the regulatory structure and recently enacted health care legislation can be found in Attachment IV: Current California Regulation [to be supplied] and the Task Force's "Regulatory Environment" report.

Figure 2: Per Capita Health Spending in California and US: 1984 - 1994



Source: A Report on the State of Health Care in California, The Lewin Group, August 1995.

FIGURE 3: SCHEMATIC OVERVIEW OF CALIFORNIA'S HEALTH CARE REGULATORY STRUCTURE



Source: Task Force Staff

Several specific elements of this regulatory picture should be highlighted to elaborate on the general industry profile. First, different state bodies regulate different types of health plans: the Department of Insurance monitors all traditional indemnity health plans (i.e. health insurance arrangements, also known as health benefits financial intermediaries) and insured PPOs, other than employer self-funded plans, under the 1982 state law described above; the Department of Corporations regulates all HMOs under California's Knox-Keene Act of 1975 (which in generalized terms may be viewed as a state counterpart to the federal HMO Act of 1973); and the Department of Health Services oversees Medi-Cal (state version of Medicaid) plans.[10] Under the federal Employment Retirement Income Security Act of 1974 ("ERISA"), self-insured employer-

[10] Under the 1965 law, Medicaid is a joint federal/state welfare program in which federal law defines benefit minimums and pays a portion of the costs (federal participation ranges from approximately 50-75% depending on the nature of the cost and the relative wealth of the state); states have the option to provide a range of additional benefits for which federal "matching funds" are available. Medicare is a national entitlement plan and an amendment to the original Social Security Act of 1935; it is regulated and funded at the federal level, but state provision alterations can be requested through various codes.

sponsored plans are preempted from state regulation, including costly benefit mandates and state premium taxes. These plans are subject to federal regulation under the Department of Labor only. (WAITING FOR SPECIFIC REVISION LANGUAGE ON ERISA ISSUES)

One of the most important things to recognize about this regulatory framework is that employers, under ERISA, are always free to cover their employees through unregulated self-insured arrangements, likely based on preferred provider insurance arrangements. Thus they can escape the cost burdens of benefit mandates or of HMO regulations under Knox-Keene if they find these burdens too onerous.

Medical groups and IPAs that contract with health plans to provide care (discussed more below) are currently not regulated closely or directly by any of the above state departments. Regulation in this area has been indirect, through regulation of medical group contracts with health plans.

IV. MANAGED CARE: VARIETY, TECHNIQUES, PLAYERS & CHALLENGES

The market, economic and regulatory factors shaping the growth of managed care have been extremely complex and have not encouraged rapid movement toward the goal of creating a quality, cost-effective and accessible integrated health care delivery system. Nearly two decades of discussion and experimentation in the arena of managed care, however, have resulted in a broader public awareness of the wide spectrum of health plans and their attributes and the main techniques that managed care organizations employ.

A. The Health Care Delivery System Continuum

From the point of view of patient freedom of choice of provider at the point of service, the health care financing and delivery system covers a broad spectrum of health benefits and financial intermediaries, ranging from the essentially unorganized traditional FFS approach to the closely managed HMO.

FFS **PPI** **POS** **HMO**

$$$ ——— *Hybrids* ——— $

Greater freedom of choice — Less freedom of choice

More expensive — Less expensive

- *FFS (Fee-for-Service).* This traditional health insurance coverage is named for its method of charging whereby a physician, hospital or other provider bills for each encounter or service rendered. Under FFS payments, expenditures increase if the fees themselves increase, if more units of service are charged, or if more expensive services are substituted for less expensive ones.

- *PPI (Preferred Provider Insurance).*Also known as “preferred provider organizations,” PPOs contract with a selected panel of providers, who agree to accept discounted fees as payment in full and to comply with reporting and utilization management. In this model, consumers have a choice of using participating (i.e. contracting) or non-participating providers; however, financial incentives are built into benefit structures to encourage customer

utilization of participating providers. This control of patient populations gives the insurer negotiating power with providers while allowing consumers more personal control over provider choice and cost decisions.

- *POS (Point of Service).* Under the newest major type of health insurance, subscribers effectively enroll in an HMO, but preserve the option to seek care outside the network with a higher level of cost sharing. Typically, the costs of going "out of network" are fairly substantial - deductibles of several hundred dolars and cost-sharing of 20-30%. The popularity of these plans indicates that consumers are willing to pay to preserve the opportunity to exercise choice; experience to date has been that members of POS plans continue to receive the vast majority of their care from the HMO panel[11]

- *HMO (Health Maintenance Organization).* An organized system that provides health care through participating providers in a geographic area and accepts the responsibility for providing or otherwise assuring the delivery of an agreed-upon set of basic and supplemental health maintenance and treatment services to a voluntarily enrolled group of persons. Providers or provider groups are reimbursed for services either through capitation -- a predetermined, fixed, periodic payment made by, or on behalf of, each person or family enrolled regardless of the amount of care s/he actually receives -- or through some variation on the FFS arrangement. Enrollees' costs will be covered only if they stay within the HMO panel of providers and adhere to the plan's referral and authorization rules. HMOs generally require copayments, a minimal payment made at the time of each visit, to help control utilization.

- *Hybrids.* Any mix of physician practices, hospitals and/or health plans that competes for enrollees and uses some managed care techniques. New federal legislation is encouraging the formation of new models, and to date California's regulatory structure has not been updated to keep up with the innovative market responses that do not fit neatly into the Department of Insurance or Department of Corporations' definitions of health plan types.

B. Essential Managed Care Techniques

Regardless of where they fall on the health care financing and delivery continuum, all managed care organizations employ techniques to control costs and quality, including but not limited to the following:

Utilization management/review, which includes practice guidelines, gatekeepers and/or pre-authorization procedures, attempts to introduce rationalization into health care delivery and remove unnecessary and ineffective resource consumption. It seeks to identify and minimize practice variations through the description, communication and promulgation of best practices.

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[11] A 1994 study estimated that approximately 16% of enrollees in POS plans used the out-of-network option (Meyer and others, 1994, quoted in Zelman, The Changing Healthcare Marketplace, San Francisco: Jossey-Bass, 1996). Recent estimates of POS subscribers going out of network have been as low as 10%.

- *Selective provider contracting* by plans allows introduction of competition among providers and the ability to remove cost- or quality-ineffective providers (i.e. physicians, hospitals, laboratories). This contracting is permitted in California under the federal HMO Act of 1973, the state Knox-Keene Act of 1975, and state AB3480 of 1982 (which authorized PPI).

- *Negotiated fees* contain costs through capitation payments, discounts (generally ranging from 20-40%), salaries or fee-for-service with "withholds" or bonuses (described in greater detail below). Currently, the federal government has legislated certain discounts for Medicare and Medicaid HMOs. Government attempts at "capping" payments in the 1970's through price controls resulted in a higher service volume, which was then responded to with the development of the RBRVS.

- *Quality management* refers to the use of process reviews, input selection, outcomes measures and patient satisfaction evaluations to rationalize expenditures and create competitive advantages. It is a dynamic improvement process and is commonly known in health care and other industries as continuous quality improvement (CQI).

- *Enrollee incentives* can be negative or positive and range from not permitting any reimbursement for use of providers not on selected panels (as in HMOs) to encouraging preventive care. In the 1990's, many purchasers have reinforced payer plan incentives by shifting a portion of the premium costs (e.g. defined contributions) to the employee, thus making the "end" health care consumer somewhat more price sensitive in his/her choice of plan. The efficiency of the market could be significantly improved by arming consumers with relevant information coupled with increased incentives to drive high quality, cost-sensitive choices.

USE OF MAIN MANAGED CARE TECHNIQUES BY DELIVERY SYSTEM TYPE

Managed Care Technique	Delivery System Type			
	FFS	PPI	POS	HMO
Selective Provider Contracting		✓	✓	✓
Utilization Management/Review				
Practice guidelines		✓	✓	✓
Gatekeeper			✓	✓
Pre-authorization procedures	✓	✓	✓	✓
Negotiated Fees[12]				
Salary				✓
Capitation			✓	✓
Discounts		✓	✓	✓
Fee-for-service with withhold	✓		✓	✓
Quality Management				
Measure outcomes and/or processes			✓	✓
Patient satisfaction evaluation (often)	✓	✓	✓	✓
Enrollee Incentives/Disincentives				
Out of network care permitted		✓	✓	
Preventive care encouraged			✓	✓

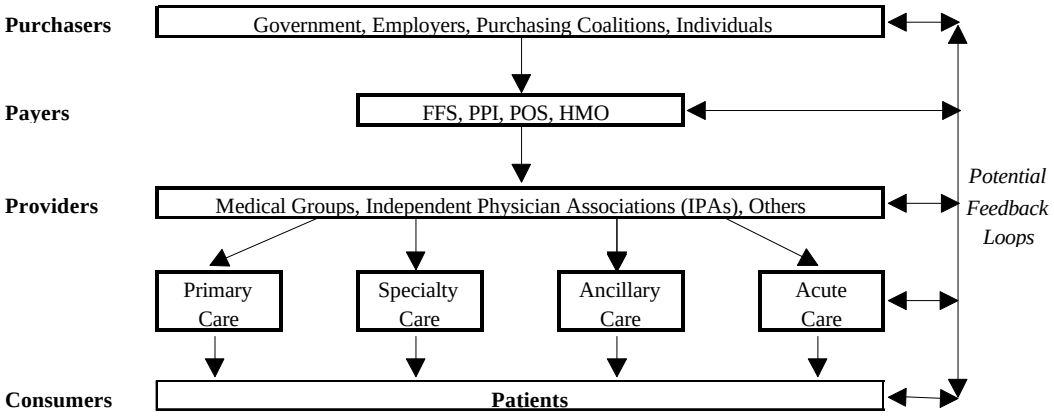
As evidenced above, managed care spans a broad range of coverage types and employs varied techniques to encourage cost-effectiveness. The variety of structure in delivery systems is explored more explicitly below and continues to evolve rapidly as economic, regulatory and market factors prompt differentiation and evolution.

C. The Players: A Four-Tiered Structure for Analyzing Health Care Delivery

The four-tiered structure below characterizes the general financial, service and information flow through the health care delivery system. The "purchasers" control the market share of the various delivery systems and contract coverage for their enrollees, or "consumers"/patients, who ultimately receive care. The "payer" type determines how restrictive use of "providers" will be: FFS has virtually no restrictions; PPI uses very limited constraints; POS encourages strong cost-consciousness and loyalty to an HMO panel of providers while retaining the "option" for choice; HMOs restrict consumers' covered care to the specified and previously contracted providers.

[12] Although this table only lists use of principal managed care techniques, it should be noted that all health care financing and delivery systems use the traditional FFS payment approach at times.

FIGURE 4: FOUR TIERS OF MODERN HEALTH CARE[13]



Purchasers

Traditionally, there have been three main purchasers of health care: the government, employers and individuals. Purchasing coalitions have become a significant force in this area. Recent purchasing trends reveal that government has taken over a larger portion of responsibility for purchasing health insurance. Coverage by private employers has declined, as they have either stopped offering any health care benefits, stopped offering benefits to employees' dependents, or discovered other ways to minimize their portion of the health care burden (e.g. part-time workers, out-sourcing). An increasing portion of the population is thus left potentially reliant on public funds – either through government sponsored coverage or uncompensated care -- for health care. A study has shown that had managed care and its downward pressure on health costs not existed, the uninsured problem could be even worse[14]. Nonetheless, uninsured levels have steadily increased to over 15% nationally and nearly 20% in California[15] despite cost containment and increasing government participation in health insurance through broader benefit range definitions for Medicaid.

Public Purchasers

Public sector expenditures include benefits for public employees and retirees (Federal Employees Health Benefits Program, FEHBP, and California Public Employee Retirement System, CalPERS), low-income Medicaid recipients (or Medi-Cal as it is termed in California), the

[13] This structure is adapted from a flow chart in J.M. Rosenbluth, "Integrated Delivery Systems," *Volpe, Welty & Company Equity Research* (an industry report), March 3, 1995, p. 27. Changes made to it were independent of *VW&C*.

[14] J.F. Sheils, R.A. Haught (of The Lewin Group, Inc.), "Managed Care Savings for Employers and Households: Impact on the Uninsured", follow-up report prepared for The American Association of Health Plans, Jun 18, 1997.

[15] A Report on the State of Health Care in California, The Lewin Group, August, 1995.

Medicare population, the safety net (government reimbursement for care to uninsured, poor people), and other special populations such as veterans and native Americans. As mentioned above, the medical inflation rate for public sector care has outpaced that of private care in recent years.

Figure 5: Public Expenditures, United States and California, 1990 and 1994, $Billions

	US, 1990	US, 1994	CA, 1990	CA, 1994
Medicaid	41.1	87.2	11.8	16.5
Medicare	109.6	168.1	10.6	10.7

Sources: CA: A Report on the State of Health Care in CA The Lewin Group, 1995. US: Health Care Financing Review, Statistical Supplement, 1996

As public expenditures have increased in California and across the nation, public purchasers have increasingly turned to managed care. California has encouraged government employees to use managed care through CalPERS which offers state employees a variety of HMO and PPO options. While California is one of the national leaders in private managed care and Medicare penetration, the state's public sector (Medi-Cal and Medicare) managed care coverage levels fall below those of several other states. (Figure 6).

Figure 6: Managed Care Penetration in Public Health Care Markets: 1992-1995

	1992	1993	1994	1995
US				
Medicare	6.0%	7.0%	8.0%	10.0%
Medicaid	12.0%	14.0%	23.0%	32.0%
CA				
Medicare	-(a)	-(a)	30.0%	-(a)
Medicaid	11.6%	16.0%	17.2%	23.4%

(a): data not available

Source: US figures: HCFA, Office of Managed Care (Dial, et al., 1996), HCFA, Statistical Supplement 1995

CA figures: CA DHS, Managed Care Division

Medi-Cal

Medi-Cal provides health insurance coverage to non-elderly, poor Californians and the disabled elderly. Non-elderly coverage rates have increased significantly in recent years. In 1993, one out of every seven non-elderly Californians and one out of every four California children was covered by Medi-Cal at some point during the year.

Medi-Cal coverage is provided to a broad range of Californians, including many in working families. Though it is primarily targeted at non-working families with children, in California 32.2% of non-elderly Medi-Cal beneficiaries are children and adults in families headed by a full-time employee.[16] California's relatively broad Medicaid eligibility criteria has restrained further growth in the number of uninsured persons and the rate of uninsurance.[17]

Employer Purchasers in the Private Sector

Although the majority of health insurance coverage in the United States has historically been linked to employment, increases in health care costs have helped prompt both a change in the type of employer coverage and a decrease in the overall percent of citizens receiving coverage through private sector work. The percent of the national employment pool being offered health care

[16] Brown, ER, "Data Watch: Trends in Health Insurance Coverage in California, 1989-1993," *Health Affairs*, Spring 1996.

[17] Ibid., p. 126.

coverage dropped from 81% in 1995 to 78% in 1996[18]. The lowest coverage percentage occurred in the Western region, where only 76% of workers were offered health insurance coverage in 1996. In addition, there has been a shift in the percentage of total employee compensation comprised by health benefits: between 1988 to 1993 in California, the average employee saw a shift from 90.9% to 89.4% of total compensation in wages and salary and from 5.6% to 6.7% of total compensation in health benefits provided by the employer[19].The national trend during this time was consistent with California's.

Private employers provide health coverage under three primary arrangements:

1. *Through a third party payer*, such as an insurance company or HMO. With traditional insurance, firms pay health plans (usually one or two per firm) a monthly or annual "premium" on behalf of each employee to insure and provide necessary care. After the premium has been paid to the plan, the employer's risk is capped.

2. *Through "self-funding" coupled with the services of third party administrator (TPA)*[20]. Under the self-funding scenario, firms pay for routine coverage for their employees, use TPAs to administer the plan and gain access to a provider panel, and cover costly events such as an extremely premature infant through the purchase of reinsurance and "stop loss" coverage. A major employer survey indicated that 46% of employees were enrolled in self-insured health plans in 1995[21]. The move to self-insurance is particularly prevalent outside of HMOs, accounting for 63% of all FFS enrollees, 60% of all PPO enrollees, 53% of all POS enrollees, and 11% of HMO enrollees. The rapid shift from FFS to managed care over the past several years has resulted in a large percent of the population being covered by self-insured plans; 61% of all employees whose employers self-insure were in managed care plans in 1995, in contrast to 33% in 1993[22].

Figure 7 compares the enrollment, by plan type, of CA employees whose employers self-fund with all employees in 1996:

3. *Through pooling their buying power with that of other firms by joining a purchasing coalition.* California leads the country in this third, and new, type of coverage. With purchasing coalitions, groups of employers pool their employee bases to exert buying power, provide wider choice, and/or pool risk, all of which leads to more affordable health coverage. Pacific Business Group on Health (PBGH) of San Francisco, a private coalition open to all California employers with over 2,000 employees, was the first coalition in the state. CalPERS also uses this approach for the state's public employees. Coalitions designed for small to medium sized employers have also been developed, most notably the state-organized Health Insurance Plan of California (HIPC), open to all employers with 50 or fewer employees.

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[18] KPMG Survey of Employer Sponsored Health Benefits, 1993-1996.

[19] Lewin, VHI, Inc., "A Report on the State of Health in California," 1995, p. 29.

[20] Third party administrators (TPAs) are also known as Administrative Service Organizations (ASOs).

[21] KPMG/Peat Marwick/Wayne State University survey, 1996.

[22] See C. Sullivan et al., "Employer-Sponsored Health Insurance in 1991," Health Affairs (Winter 1992): 172-185.

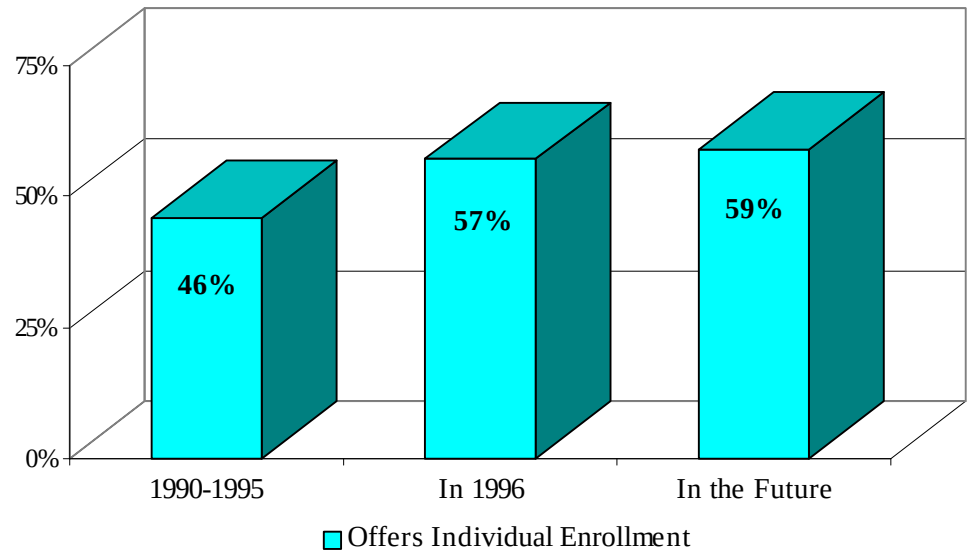
Some private coalitions, such as Benefits Alliance and California Choice are also addressing the health care purchasing needs of small or mid-size firms in the private sector.

The rate of health care coverage through employment is correlated with the size of a company and the industry. As Figure 8 illustrates, smaller firms are less likely to offer insurance to their employees. These factors bear out in California, where the HIPC, was created in 1993 to help ameliorate the market gap in coverage for employers with fewer than 50 employees. The HIPC currently has 363 members, representing over 9400 enrollees. Over 20% of HIPC members were uninsured prior to joining the HIPC.

Individual Purchasers

The smallest group of purchasers are individuals who purchase insurance from a health plan because either they do not qualify for or do not use public or employment coverage. The number of individual purchasers is relatively small because the people who are not offered coverage through work and who do not qualify for public programs tend to be poor and cannot afford to purchase individual insurance[23]. Although more health plans are now offering coverage to individuals, enrollment has not increased dramatically. (Figures 8, 9). The economic considerations for uninsured individuals considering purchasing individual coverage are discussed below.

Figure 8: Percent of California HMOs Offering Individual Coverage

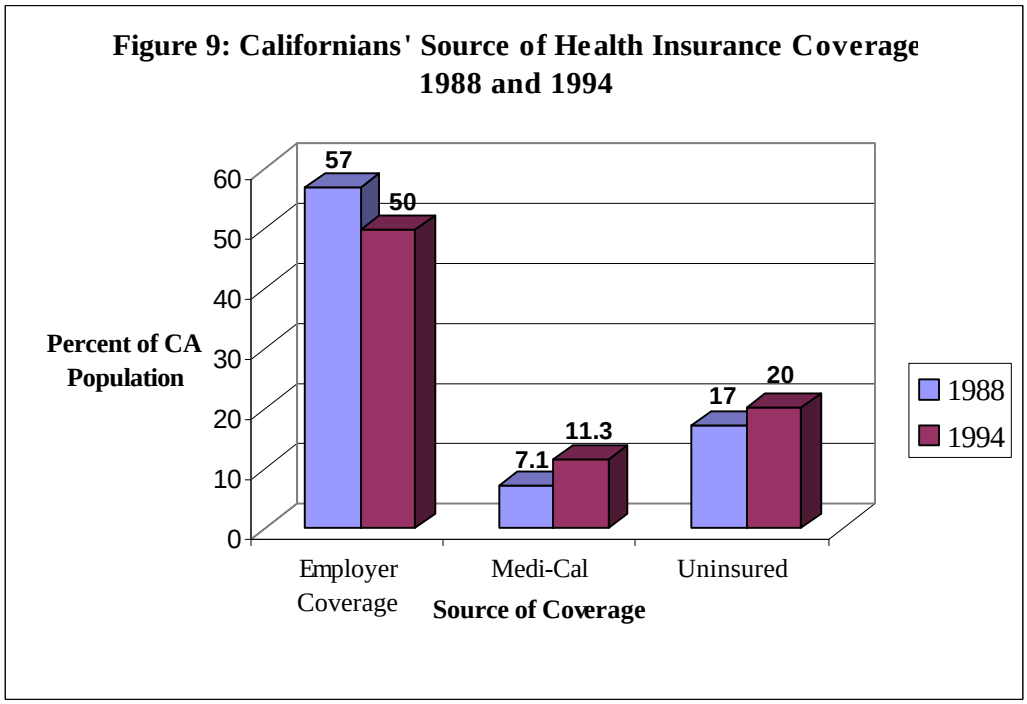


Source: Deloitte & Touche, California Association of HMOs, 1997 Profile.

[23] An exception to this is seen in the Medicare program, where some wealthier retired individuals buy supplemental insurance.

The Uninsured

The percentage of Californians without health insurance coverage of any kind has increased significantly over the past decade. As Figure 9 shows, employer coverage dropped significantly from 1988 to 1994, while both the percent of the population covered by Medi-Cal and the percent without insurance increased. Figure 10 compares California with the US in 1994, and reveals that California's level of employer coverage falls below the national figure, while its Medicaid (Medi-Cal) and uninsured rates are significantly higher.



Source: Brown, ER, "Trends in Health Insurance Coverage in California, 1989-1993," Health Affai Spring, 1996.

Figure 10: Comparison of Percentage of Californians with Private Insurance

with Uninsured and Other Insurance Types, 1994

	CA	US
Privately Insured	4%	5%
Uninsured	20%	17%
Job-based		
Medi-Cal (Medicaid)	14%	10%
Other Public	2%	2%

Source: US Bureau of the Census, March 1995 Current Population Survey.

A multi-year study of health insurance coverage trends in California supports these figures and elaborates on some of the causes and effects of the state's high uninsurance level.[24]

An increasing number of working Californians are without insurance. Though expansions in Medi-Cal during the 1989-1993 time period resulted in uninsurance rates among poor Californians remaining basically flat, the rate of uninsurance rose in the employed population -- most notably from 33.5% to 43.3% among self-employed workers -- during this time.

A combination of increasing poverty rates and rising insurance costs have made it difficult for uninsured individuals to purchase coverage through employers or in the individual market. From 1989 to 1993, the proportion of California's non-elderly population living in poverty increased by one third. Forty percent of non-elderly Californians were living below 200% of the federal poverty level in 1993. Even among families with a full-time, full-year employee, 23% had family incomes below 200% of poverty.[25]

Between 1989 and 1993, employment-based health insurance costs rose, on average, 13% per year in HMOs, 17% per year in PPOs, and 19% per year in FFS plans. As previously stated, many firms have reacted to rising health care costs by purchasing less expensive plans, changing eligibility rules for employees or shifting a higher percentage of costs to employees. Workers' contributions to the cost of coverage increased from 19% to 29%, on average, of the total for individual coverage and from 10% to 25%, on average, for family coverage. These shifts resulted in many employees declining to participate in their employers' health plans. National figures show a decrease in full-time employee participation in employer-sponsored health plans from 92% in 1989 to 83% in 1993. National statistics from year end 1996 showed a change in this trend in response to the easing of health care inflation: between 1994 and 1997, the employee portion of the health benefits contribution declined.[26]

The cost implications of increased participation in health insurance by the uninsured reveal a situation which is unlikely to be remedied without a significant subsidization of coverage: premium costs for a comprehensive health plan represent approximately 15% of the income of an individual at 200% of the poverty level, and over 60% of the uninsured in California have incomes *below* this level.[27]

California recently established the California Children's Health Plan (CCHP), which will extend coverage to approximately 580,000 children under the age of 19 from families with incomes below 200% of the poverty level. The state has modeled the CCHP after major purchasing coalitions such as CalPERS, PBGH and the HIPC, which offer consumers a choice of plans.

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[24] Brown, ER, "Data Watch: Trends in Health Insurance Coverage in California, 1989-1993," *Health Affairs*, Spring 1996.

[25] Ibid. p. 126

[26] "Health Benefits in 1997," KPMG, pp. 32-35.

[27] Ibid., p. 128.

Families will share in the costs of insuring children, providing approximately $8 per child per month toward the premium[28].

Additional information on the impact of managed care on the "safety net" will be provided in the Task Force's papers on Vulnerable Populations and Academic Medical Centers.

The Task Force recognizes the serious problem of lack of any or sufficient health care insurance for many Californians. While it is deeply concerned about this issue, the Task Force acknowledges that the issue of health insurance coverage falls outside the scope of the mandate for the Managed Health Care Improvement Task Force.

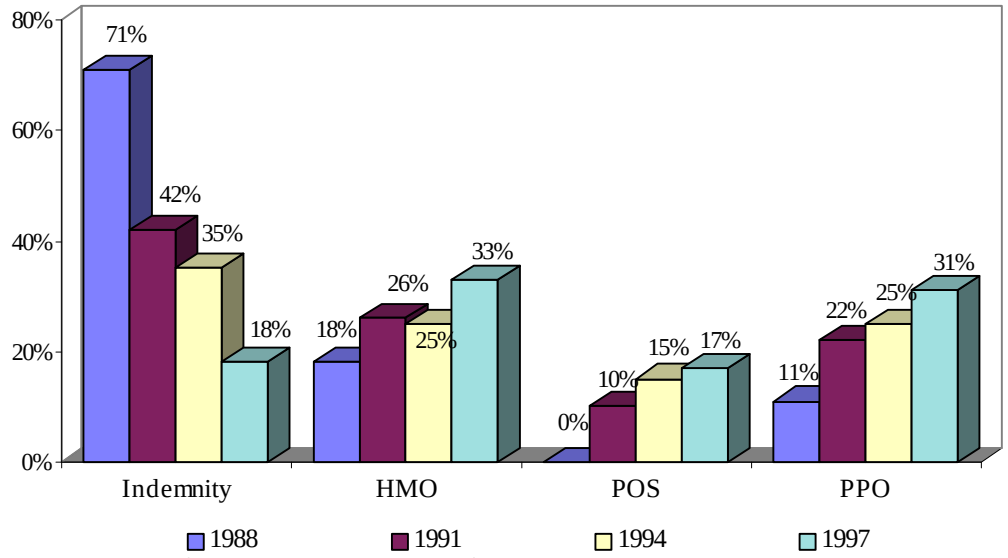
Payers and Providers

Payers and providers represent what most people currently consider the "heart" of the health care system. Payers are the traditional indemnity insurers and newer managed care plans. Providers include physicians, hospitals, acute care centers and ancillary service suppliers.

Figure 11 chronicles the popularity of various plan types over the past decade. As is evident, enrollment in pure indemnity/FFS insurance has decreased dramatically as managed care enrollment has made significant gains. The newest form of managed care, POS, is gaining in consumer popularity as it combines the cost-effective elements of HMOs with the flexibility and easier access to providers of PPI. Government-funded Medicare and Medicaid have been slower to shift from traditional FFS-based plans to managed care.

[28] California Children's Health Plan, August, 1997.

Figure 11: Enrollment by Plan Type, U.S.: 1988-1997



Source: KPMG Surveys of Employer Sponsored Health Benefits, 1997; 1996; 1994; 1991; HIAA Survey, 1988.

Payers

Reimbursement mechanisms between payer and provider represent one of the key distinguishing features both among the health plans in the continuum described above and among the different sub-categories of HMOs described here. Reimbursement can be tied to either volume or quality measures or both. Reimbursement also occurs on two levels: from the payer to the provider group and from the provider group to the individual provider level.

HMO Plan Models

There are five main HMO sub-categories: the fully integrated payer/provider "group" model, the "staff", "independent physician association," "network" and "mixed" models. The HMO varieties can be categorized into two broad groups: integrated delivery system HMOs and "carrier" HMOs. Integrated delivery system HMOs feature a vertically integrated payer and provider organization with mutually exclusive contracting. In contrast, the more common "carrier" HMOs, with origins in the early IPA plans feature selective provider contracting but not on an exclusive basis.

Integrated Delivery System HMOs:

- *Group.* An HMO that contractswith one independent medical group practice to provide health services under a mutually exclusive contract. The plan (payer) level compensates the medical group (provider) with prepaid "capitation" payment. In the case of the original HMO, the provider level medical groups typically reimburse individual physicians with salaries and modest bonuses based on hospital cost experience. Under this model type, the sole contracted medical group determines the formulary and utilization procedures for its physician members. As such, procedures are clear, HMO bureaucracy is minimized, and physicians typically feel more ownership than in other "carrier HMOs" which operate without exclusivity and its associated influence.

- *Staff.* A staff model HMO delivers health services through physicians who are exclusively employed by the HMO. Typically, the physicians are paid straight salaries. Currently, there are only two pure staff model HMOs in California, both small public or not-for-profit entities. The popularity of the staff model is on the wane in California and elsewhere. For example, a health plan which was the pioneer staff model nonprofit in the1970's recently converted its staff model clinics to groups in order to get the physicians more involved in cost management and patient satisfaction.

Carrier HMOs:

- *Independent Physician Associations (IPAs)*The term IPA has two connotations: (1) an HMO that relies primarily on physicians in independent or individual practices; and (2) an administrative organization that negotiates contracts with health plans and obligates its associated physicians (in independent or group practices) to provide all necessary professional services to members of an HMO that contracts with them. IPAs do not engage in exclusive contracting.

  Independent physicians or medical groups usually contract with multiple IPAs, and might see patients covered by several health plans with which these IPAs have contracts. The IPA organizations and the medical groups typically pay doctors based on negotiated FFS with withholds or salaries with bonuses based on quality and utilization measures. A feature of this model is that the participating physician generally has most of his or her practice outside a single IPA.

  Like providers in other carrier HMO organizations, IPA physicians face significant coordination issues as a result of the fact that they often contract with multiple plans whose medical directors or oversight committees determine the utilization controls and formularies. Providers often feel their opinions are not reflected in the distantly set formulary, and as IPA medical groups contract with many HMOs, keeping formularies and utilization procedures straight is often complex and frustrating. Although HMO plans are regulated by Knox-Keene at the state level, minimal regulation exists at the medical group or IPA delivery level, and a medical group's reimbursement practices and service quality are not generally publicly known.[29]

  IPAs are best described as a "network" form of physician organization, performing many of the administrative and contractual functions pioneered by integrated groups, but without unified ownership and an internal group culture. IPAs can provide many of the scale economies and risk-spreading benefits of group practices, but face structural challenges to creating a physician group culture, because most IPA physicians belong to multiple IPAs and don't necessarily have a strong allegiance to any one group.

- *Network.* A pure network model HMO contracts with two or more independent group practices, possibly including a staff group, to provide health services. While a network may

[29] This stated, some purchasing coalitions and industry groups (e.g. California Cooperative HEDIS Reporting Initiative—CCHRI) are beginning to use their market or social power to "reach through" the HMO and report medical group level information for quality.

contain a few solo practices, it is predominantly organized around groups. Like the IPA model, this format does not have exclusive contracts.

The main difference between the network and IPA models is that in the network model the independent medical groups (or more rarely physicians in solo practice) do not have a regionally organized "IPA" intermediary as an administrative body to negotiate contracts with HMOs. The various medical groups in a network contract with the various payer plans independently. The Network model HMO faces the same complex coordination issues associated with the IPA model.

- *Mixed.* An HMO that uses any combination of the above models. For example, in recent years as a result of acquisitions, mergers and innovative adaptation to market conditions, HMO plans have simultaneously contracted with multi-specialty medical groups and IPAs. The term "mixed" can be somewhat ambiguous as an HMO carrier that contracts with medical groups and IPAs might be referred to as "mixed" or "network". Mixed models are often HMOs with IPAs and a newly acquired staff form that are converting to a network form.

Providers

As managed care has become the norm in California, physician organizations, in the form of group practices and IPAs, have become a powerful force. These groups are developing ownership and contractual relationships with hospitals and specialists, and increasingly bear a significant portion of the risk in the system through capitation contracts with insurers. Because these groups are bearing much of the financial risk, the insurers with which they contract delegate much of the utilization and care management responsibility to them as well. To date this dynamic remains largely a California phenomenon; while physician groups and capitation contracts are becoming more widespread in other regions, physicians across the country are still largely employed by hospitals or medical groups or aligned with these entities under independent or small group non-capitated contracts.

Physician Groups Practices and Organization Models

The American Medical Association estimates that the number of physician group practices in the US grew almost 20% between 1991 and 1995[30]. There are about 20,000 physician groups in the US today, and about one third of all physicians practice in these groups.

Physicians have been motivated to form groups by several industry factors: contracts with health plans are generally available only through group practices; economies of scale are becoming increasingly important as the market becomes more competitive; only as a member of a group is a physician able to spread the financial risk of capitation payment; transaction costs associated with negotiating, monitoring and enforcing agreements can be spread across a group; and a group creates an organizational context for the process innovation which is becoming important in

[30] Cain Brothers, Incorporated research.

managed care.[31] Large medical groups and IPAs in California are aggressively growing by both bringing in small primary care practices and merging with other integrated groups[32]

The basic group models, defined by ownership and organizational characteristics, include: tax-exempt, independent; tax-exempt, hospital or health system owned; tax-exempt, faculty practice plan; taxable, privately owned; taxable, investor owned and taxable, partially owned by strategic investor. While ownership status and organizational model do not significantly impact many aspects of practice, they do play an important part in others, including access to capital for infrastructure and/or growth, ability to recruit new physicians and the types of physicians recruited, physician satisfaction and morale and physician incentives. Attachment A, the Group Practice Model Matrix, elaborates on some of the characteristics of the different group types across a range of issues and concerns.

Medical Group Management Organizations

As "independent" medical groups have become a larger and more prevalent feature in the industry, management organizations designed to help physicians deal with the complexity of the health care market have appeared and evolved. These organizations, known as physician practice management companies (PPMs or PPMCs) and management services organizations (MSOs) work with physician groups -- either under contract or through ownership -- to handle administrative functions, negotiate contracts and access capital.

Consumers

Historically, consumers have had very limited direct influence on health plan or provider service structure. Enrollees generally trusted their physicians to assert their perceived interests in the FFS structure, and uninsured people relied on charities or the government to represent their perceived interests. With the introduction of broader plan choices as well as service and cost containment, consumers are being prompted to be more assertive.

While consumer groups organized around particular health issues have begun to impact practices of plans and providers, the diversity of consumer interests in health care has made it difficult for consumers to organize effectively to influence the health care system. Mechanisms to incorporate consumer feedback into the operations of health plans and provider groups are in their formative stages; their strength varies and is often limited. Nationwide legislation designed to improve consumer access to health care system information introduced across the country over the past several legislative sessions, however, points to the increasing concern over and interest in the rights of consumers in the managed care system. *(Refer to the Task Force report on Consumer Involvement, Communication and Information.)*

Consumer concern with managed care often revolves around the issue of accountability. The shift from FFS to managed care has resulted in the "fragmentation" of accountability from the

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[31] Robinson, JC and Casalino, LP, "Vertical Integration and Organizational Networks in Health Care," *Health Affairs*, Spring, 1996.

[32] Ibid. p. 9.

consumer's perspective. Where historically consumers relied on physicians to advise them on medical decisions and insurers to cover the costs of care, they now face a system and a series of organizational structures where decision making and financial responsibility may not clearly rest with easily identifiable or discrete parties. A managed care organization contracting with a range of medical groups and "carving out" benefits such as mental health and pharmacy (and likely employing a complex range of coverage and decisionmaking criteria) may appear quite confusing to a consumer who previously relied on "her own" physician as a point of accountability in the health care system.

In addition to requiring and having access to more information about the health care system in the era of managed care, consumers are being made more aware of the cost implications of various plan types. At the time of enrollment, consumers in a workplace often face different contribution levels that correspond to the costs of the plans. A consumer enrolled in a PPI or POS plan also faces different costs based upon the type of provider he/she chooses to use. Employers and plans are using financial incentives directed at consumers to help reinforce other cost-controlling efforts of managed care.

D. Challenges Health Care Must Address to Create Cost-Effective Delivery

The primary challenges and objectives facing health care financing and delivery systems are those of integrating a broad range of previously independent entities. Although FFS plans have historically sought to integrate various components of health care financing and delivery, the HMO end of the delivery continuum is addressing the various forms of integration more systematically. To create both cost-effective and high quality health care, the health industry is addressing seven main types of integration.[33]

1. *Integration between financial responsibility and care delivery*In this stage of integration, provider incentives to reduce unnecessary costs are aligned with patients' interests in receiving high quality care. Before health care costs escalated to a point at which they became a major economic concern, physicians were trained to provide care without regard to cost, and were supported by society in doing so. Incentives introduced under managed care include per capita prepayment or "capitation" which has providers sharing in the financial risk of the insurance arrangement to encourage them to deliver appropriate care in the most cost-effective manner.

2. *Integration between providers and enrolled populations*The primary challenge the healh care system faces is in meeting the health needs and improving the health status of the population. This integration facilitates and encourages population-based medicine that broadens encounter-based medicine by incorporating an epidemiological perspective. Elements include a greater emphasis on preventive medicine, health and safety education and advocacy, and a matching of appropriate numbers and types of providers to the needs of an enrolled population. Use of "segmentation" techniques to identify members of the enrollee population with common health status characteristics or behaviors and provide them with

[33] Integration need not mean common ownership. In fact, the trend is toward integration by contractual relationships.

appropriate educational materials, care venues, screenings, etc. is an example of this type of integration.

3. *Integration of the full spectrum of health care services* By either duplicating or creating the effects of an integrated delivery system HMO through contracts and structures that align incentives, this integration seeks a holistic approach to health care that would optimize the use of preventive services, education, doctors' office, inpatient and outpatient services, home nursing, pharmaceuticals, and other resources. For example, doctors collaborate with pharmacists to choose therapies that produce the best outcomes and minimize total costs of care, rather than simply choosing drugs based on cost or supplier relationships in isolation. Care is delivered in the least costly appropriate setting.

4. *Integration among doctors and between doctors and other health professionals* This level of integration assumes that an optimal team of doctors and allied health professionals will be brought together to provide appropriate and cost-effective care. It depends upon plans' contracting with the right numbers and types of professionals and establishing the right specialty mix to assure patients good access to primary care and to ensure that proficient and qualified specialists are available when necessary. For example, many organizations now use nurse practitioners to provide a great deal of primary care, including annual ob/gyn exams.

5. *Integration between doctors and hospitals* This integration ensures that doctors have an interest in efficient utilization of hospital resources, an area in which there were few incentives under the traditional FFS system. In a well integrated system, doctors develop practice patterns that facilitate efficient hospital operations; they work with hospitals to reduce unnecessary record keeping and advise on infrastructure investment decisions.

6. *Horizontal integration among hospitals* With this type of integration, hospitals in a region combine to share administrative support functions and to consolidate volume-sensitive clinical services such as open-heart surgery and neonatology. There are several prominent examples of horizontally integrated hospital systems in California. Horizontal integration also increasingly represents mergers of groups of hospitals across regions to gain buying power from national suppliers and/or to gain easier access to private capital markets.

7. *Integration of patient information* Managed care has encouraged the integration of patient information collected at all points at which a member has contact with the health care delivery system. Ideally, each provider who has patient contact can have a complete picture of the patient's medical history, which helps him/her to coordinate care with other providers and avoid duplicate tests and unfavorable drug interactions. This information, used anonymously, can also serve as a basis for research on the relationship among diagnoses, treatments and outcomes. It can also be used to provide feedback to providers for quality improvement purposes.

V. CALIFORNIA'S HEALTH CARE DELIVERY SYSTEM

As many in the health care industry attempt to develop the integrations described above, the composition and demographics of health care delivery has begun to shift. Managed care organizations' efforts to drive excess cost out of health care have affected, among many other things, the utilization of hospital beds and the overall volume and composition of the physician

supply. An overview of the key macro changes in California's health care delivery systems accompanying the proliferation of managed care follows.

A. Physician and Hospital Bed Supply

Changes in hospital bed capacity and utilization rates and the composition and supply of the physician work force are relevant and easily measurable indications of the impact of managed care on health care delivery. In the cost-unconscious FFS era, hospitals competed for physician loyalty and became sources of civic pride by having a large bed capacity and by acquiring state-of-the-art medical technologies. Because excess capacity uses resources inefficiently, because federal Medicare inpatient hospital compensation is now on a per case basis rather than cost reimbursement, and because managed care will not pay hospital overhead charges, hospitals in the managed care era are reducing bed capacity.

Figure 12 shows how the reduction of hospital bed capacity in California has mirrored the national trend but well surpassed the national average. Although capacity has decreased, utilization figures show that the system is still facing an excess capacity (Figure 13)[34]

Φιγυρε 12: Ηοσπιταλ Βεδσ/1000, ΧΑ ανδ ΥΣ, 1990–1996

	1991	1993	1995
ΧΑ	2.65	2.51	2.39
ΥΣ	3.69	3.57	3.34

[34] A hospital bed at 80% occupancy produces 292 days per year. 2.39 beds/1000 population produces 698 days/1000 per year. California is using 523 days/1000 per year and could use fewer if it were at an efficient level. At current occupancy levels California needs only 75%of its hospital bed supply.

Figure 13: Hospital Bed Utilization Rates, CA and US, 1990-1996 (days/1000)

	1990	1993	1995
CA	610.08	561.24	523
US	889.56	838.91	765

Source: American Hospital Association, 1991, 1994 and 1996 Hospital Statistics

Note: Bed day figures include acute hospital days only.

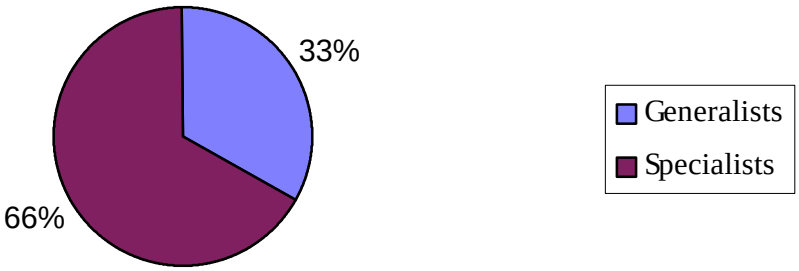
In addition to prompting rationalization of hospital beds and impacting hospital utilization, managed care will likely bring about a measurable effect on the composition and overall size of the physician work force. As managed care organizations have emphasized prevention and health promotion and have sought to match contracted physician supply to the needs of their enrolled populations, the HMO industry demand for primary care physicians (PCPs) has increased, and specialists have faced a tighter market. The Council on Graduate Medical Education (COGME) recommends that the U.S. physician workforce be composed of 50% specialists and 50% generalists (family practitioners, general internists, general pediatrics and general practice).[35] The Pew Health Professions Commission concurs with this, and additionally recommends that there be a 20% reduction in US medical graduates.[36]

[35] "California Needs Better Medicine: Physician Supply and Medical Education in California, California Primary Care Consortium and the Center for Health Professions," University of California San Francisco, May, 1997.

[36] "Critical Challenges: Revitalizing the Health Professions for the Twenty-First Century," Pew Health Professions Commission, December, 1995, p. 29.

Source: "California Needs Better Medicine: Physician Supply and Medical Education in California, California Primary Care Consortium and the Center for Health Professions," UCSF, May, 1997.

Figure 14:
Distribution of Physicians in CA, 1994



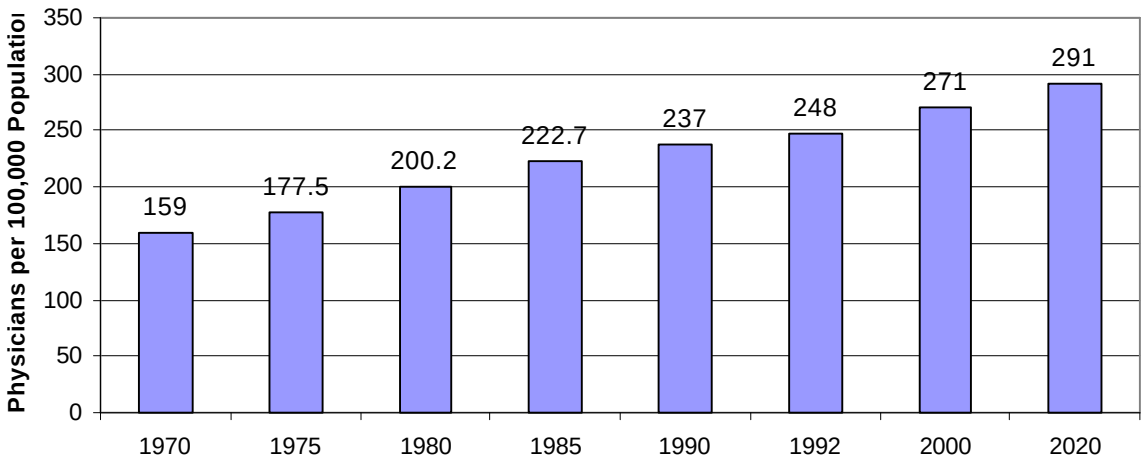
As figure 14 indicates, CA was well off this mark in 1994, with only 33% of active non-federal physicians practicing as generalists. These percentages did not materially change from 1990 to 1994. From 1995 to 1996, changes in the market began to become apparent as trends in enrollment in residency programs showed a shift toward generalist fields. (See Task Force Report on Academic Medical Centers for a further discussion of trends in medical school and residency enrollment).

The state of California currently displays substantial regional variation in the supply of patient care physicians. Though statewide the specialist per 100,000 population ratio was 126, or 20-48% above COGME recommendations, three regions had ratios that fell below the recommended level. The supply of generalists in most California regions is inadequate to barely adequate when measured against COGME standards, and is particularly low in inner cities and rural areas.[37]

[37] Ibid.

As managed care has grown, imbalances in the physician supply have become more apparent. Federal and state legislation facilitating selective provider contracting enabled managed care organizations to create competition among physicians and reduce costs, and managed care organizations are beginning to use of allied health professionals such as advanced practice nurses in primary care roles. The physician supply increased steadily through the 80's to the mid 90's (Figure 15)[38]. Figure 16 presents data from a study comparing GHAA (now AAHP's) and four HMOs' estimates of needed staff with the number of available MDs, generalists, specialists, and allied health professionals (e.g. advanced practice nurses), illustrating projected industry trends.

Figure 15: Physician to Population Ratio, 1970-2020 (est)

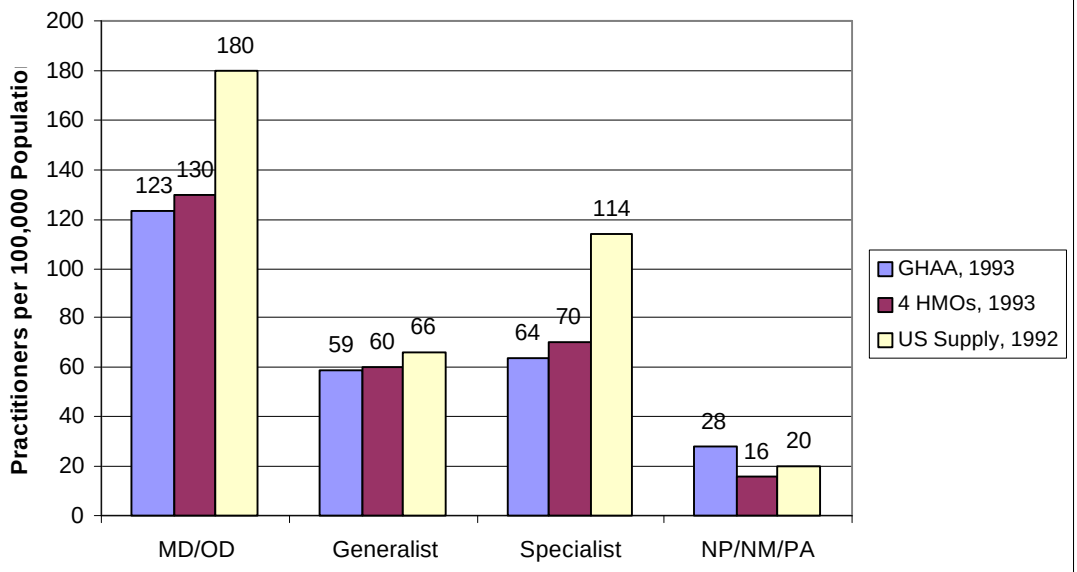


Source: Health Personnel in the US, Eighth Report to Congress, 1991, DHHS Publication No. HR.S-P-OD-92-1. Bureau of Health Professions, Health Resources and Services Administration, DHHS, Sept. 1992.

(Estimates)

[38] Medical school enrollment and residency figures show the potential for a decrease in these figures early in the next century. See Task Force Report on Academic Medical Centers.

Figure 16: HMO Staffing Estimates vs. US Supply, 1992-1993



Source: Weiner, J. Assessing Current and Future US Physician Requirements Based on HMO Staffing Ratios: A Synthesis of New Sources of Data and Forecasts for the Years 2000 to 2020, Technical Working Paper. Rockville, MD, USDHHS, HRSA, Office of Research and Planning, January 27, 1995.

B. Composition of Health Care Personnel

Reductions in physician and hospital bed supplies represent just the surface of the health care transformation. Although it is difficult to determine to what degree these changes are attributable to managed care, demographic changes or regulatory developments, it is clear that evolving economic incentives have altered the composition of health care delivery. With managed care's emphasis on prevention, an aging population, and financial incentives to move patients out of hospitals at the earliest appropriate time, expenses have been reallocated from specialists and acute hospital settings to PCPs, pharmaceuticals, out-patient care, and long-term care areas.

The composition of non-physician health care personnel has also changed to reflect managed care's effort to match skill and cost with patients' medical needs. Training programs and demand for certain groups of health care providers, including advanced practice nurses and physician assistants have been increasing.[39] Health care employers in California have indicated

[39] UCSF Center for the Health Professions.

that they will significantly increase the number of Advanced Practice Nurses they employ over the next several years.[40] (Figures 16 and 17)

Figure 17: Anticipated Growth in Annual Enrollment in Advanced Practice Nursing Program

CA, 1994-1997

	1994	1997 (est.)	Overall Growth	Anticipated Annual Growth
Generalist NP	542	658	21.4%	6.7%
Specialist NP	128	152	18.8%	5.9%
Nurse Midwife	88	102	15.9%	5.0%
Nurse Anesthesist	41.0	58	41.5%	12.3%
Clinical Nurse Specialist	377	396	5.0%	1.6%

Source: UCSF Center for the Health Professions, California Needs Better Medicine, May 1997.

C. Covered Services

Mental illness and substance abuse are increasingly recognized as causal or compounding factors in poor health status. It is generally acknowledged that while managed care organizations have broadened access to services (i.e. have included coverage for some mental health and substance abuse services in standard benefit packages), they have placed stricter limits than are customary under traditional fee for service plans on provider choice and on the volume of reimbursable services. Recent studies have indicated several general trends in mental health coverage under managed care in both the public and private sectors: a decrease in the total cost of mental health care coverage; a decrease in the amount of inpatient utilization and a substantial increase in outpatient utilization; and an increase in access as measured by total number of users[41].

Many managed care organizations treat mental health services as "carve outs" and subcontract with specialty organizations to develop networks and administer benefits. Mental health advocates indicate that managed mental health care, particularly that provided under "carve outs," presents particular obstacles and limitations to those seeking mental health services: the variation in subcontractors leads to problems with continuity of provider, the trend of lowering capitation rates may result in substandard treatment and care, potential compromising of the provider's role

[40] California Strategic Planning Committee for Nursing, *Planning for California's Nursing Workforce*, 1996.

[41] Information provided by the California Mental Health Directors Association. (Specific cites forthcoming)

as "patient advocate," and pre-authorization rules which require "involuntary commitment" criteria to be met before inpatient care is allowed.[42]

Mental health benefits provided under managed care often include services provided by a greater diversity of providers (social workers and nurses are often care providers along with the traditional psychologists and psychiatrists) than is customary under fee for service. In addition, the array of services and settings in which services are provided tend to be broader than those associated with FFS mental health care.

Behavioral health and health promotion activities are fundamental features of an optimal managed care system, but are only slowly being incorporated into standard medical training and practice. The clinical practice of these disciplines relies on multi-disciplinary teams, requiring physicians to work collaboratively with allied health professionals.

V. MATURATION AND CONSOLIDATION OF THE INDUSTRY

A. Industry Maturation

Economic, regulatory, cultural and other effects all shape a state's industry profile. California is advanced in its managed care penetration, but it is not necessarily viewed as a "representative" state. For example, medical groups and IPAs are very prevalent and powerful in California, while in most other states physicians are employees of hospitals or still contract individually with HMOs. This fact, and others, shape the industry maturation and consolidation process. As the initial managed care plans met with success in various regions, new competitors, in the form of IPAs, began to enter to complement the initial firms' ability to address a growing market need—cost-effective health care delivery.[43] The early development of managed care followed the typical industry pattern: as entrepreneurs see the success of a new form in one market, they introduce it to new markets and eventually competitors appear or spread there also.

B. Mergers and Consolidation in the Health Care Industry

In the managed care industry, expansion dominated until the late 1980's and early 1990's when widespread merger activity and industry consolidation began among the larger players. While the payer/HMO and hospital consolidations have been attracting the most attention, mergers are occurring in all tiers of the health care industry.

HMO Consolidation

In the late 1980's, managed care coverage was fairly extensive, and HMOs began to be concerned that growing competition would erode their profit margins. Large, publicly traded HMOs sought

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[42] California Psychiatric Association, Draft Presentation to the Managed Care Improvement Task Force, 1997.

[43] The first IPAs in CA were developed in the 1960's.

to assure earnings growth by cutting costs and entering less developed markets. As a result, HMOs have predominantly undertaken horizontal or market extending mergers.

With horizontal mergers, firms reduce the costs of duplicate operations and/or increase their market power vis-á-vis suppliers and consumers; mergers may also be used to absorb a rival. In market extending mergers, firms gain needed earnings for financial stability and broader geographic coverage for large purchasers. HMOs are using mergers to improve competitiveness, reduce operating costs, increase revenues to satisfy Wall Street, become more attractive to larger purchasers, or reduce competition. Some HMOs have also merged as a defensive measure, fearing that they might miss a time-limited opportunity to establish new market presence.

Figure 18 illustrates HMO mergers by tracing the composition of the five largest HMOs in California in 1996[44]. Government and private-sector analysts have conducted a great deal of research to determine potential effects of this consolidation on health care delivery. No proposed major California merger has been denied yet because of anti-trust concerns, but as managed care penetration and consolidation increase, this concern becomes more of an issue. Some argue that the economy of scale argument for merging becomes less valid above a relatively small total HMO enrollment of 115,000.[45] Others argue that consolidation may be acceptable if no firm or firms have the ability to dominate completely and cite that some of the largest firms are addressing consumers needs most creatively and efficiently (e.g. introduction of the POS plan). Most industry observers agree that there is still a great deal of competition at the HMO level in all but a few rural areas where competition has always been a problem.

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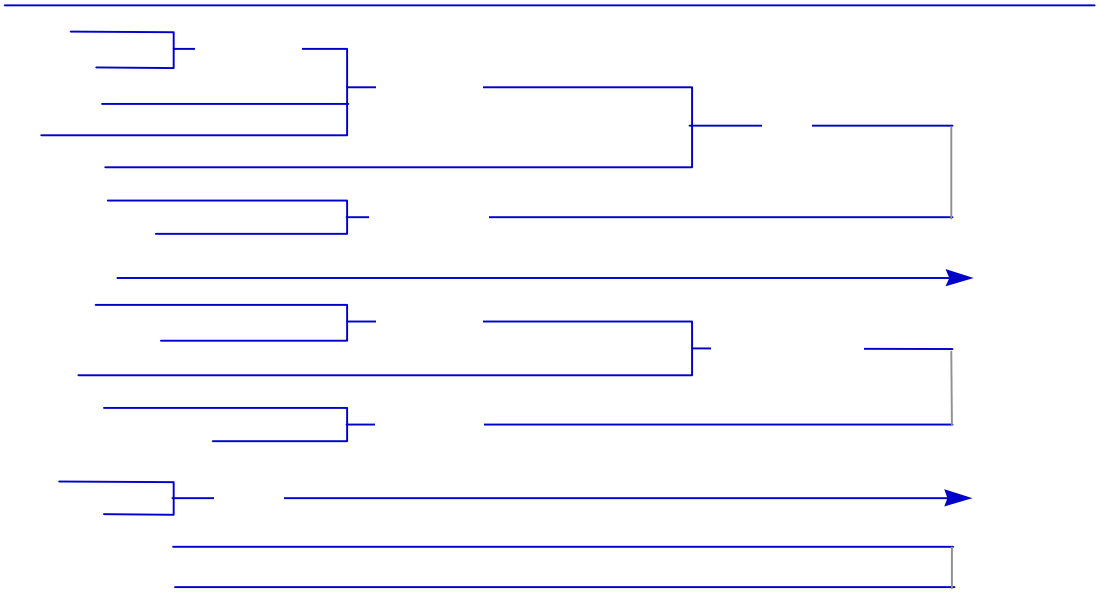
[44] Data presented is from July 1996. Some recent developments are not noted on this chart. Foundation and HIS merged to form FHS. Pacificare and FHP completed a merger, and Blue Shield acquired two HMOs in Southern California, making them the fourth largest HMO in California in 1997.

[45] R. Given, "Economies of scale and scope as an explanation of merger and output diversification activities in the HMO industry," *Journal of Health Economics*, (Winter, 1996), pp. 685-713.

Figure 18: CA Health Plans Consolidation – 1990-1996



[WE ARE AWAITING AN UPDATE AND VERIFICATION OF THE ABOVE CHART TO BE PROVIDED BY THE CA ASSOCIATION OF HEALTH PLANS]

Other Industry Tiers

Although some horizontal and market extending merger activity among other industry player levels may have occurred for efficiency reasons, HMO plan consolidation likely prompted a quicker and more extensive trend. As HMOs increased their buyer and seller power, hospitals, medical groups, IPAs and purchasers had to consolidate as a defensive measure so that their margins would not be decimated.

Provider consolidations have become more prevalent at both the hospital and medical group level. Medical groups have merged to gain greater contracting leverage with health plans and hospitals, to build patient bases large enough to allow for effective capitation at the medical group level and to acquire the infrastructure necessary to effectively manage care. Hospital mergers have also become more prevalent, as hospitals seek to exploit economies of scale and scope in technology, to reduce administrative costs and realize purchasing economies, to gain marketing benefits (from

the ability to offer "one stop shopping") and to offer purchasers greater stability.[46] Because they generally take place at a local level, these horizontal mergers have drawn a great deal of attention and have become a cause for antitrust concern in some locations.

Vertical mergers combining hospital and medical groups have also become more commonplace. These organizations are attempting to coordinate a range of services such that they could go directly to the purchaser and capture the profits currently being collected by HMOs.

C. For-Profit vs. Not-for-Profit Corporate Status

Historically, insurance plans and delivery system HMOs were non-profit for several reasons: physician employees or contractors received all compensation through salary or FFS reimbursement; the physician-driven organizations did not need access to private capital markets and preferred not to be financially accountable to Wall Street. US Hospitals have historically been not for profit as well, a fact which has been seen as appropriate to their charitable purpose. The majority have been government-owned or owned and operated by religious organizations, and the remaining private hospitals were largely built with government funds through the Hill-Burton program. The government continues to subsidize hospital construction through tax-exempt bond financing.

As health care delivery has shifted from FFS to managed care and competition among all players has proliferated, access to private funds has become more important.[47] Not-for-profit status has become increasingly difficult to maintain because it often precludes access to the capital critical for growth and investment. Additionally, one traditional source of non-profit capital, subsidized government loans, has virtually dried up as health care expenditures have sky-rocketed and deficits have become more onerous.

Although a few large non-profits may have enough internally generated revenues or market clout to survive while staying non-profit, but most do not. For-profit status is becoming increasingly more common in CA and across the nation. Figure 19 shows how the profit status of HMOs shifted in California from 1985-1995. The shift of enrollees from not for profit to for profit HMOs has been dramatic: in 1980, 84% of HMO enrollees were members of not-for-profit plans; by 1994 only 35% of enrollees were in not-for-profits.[48]

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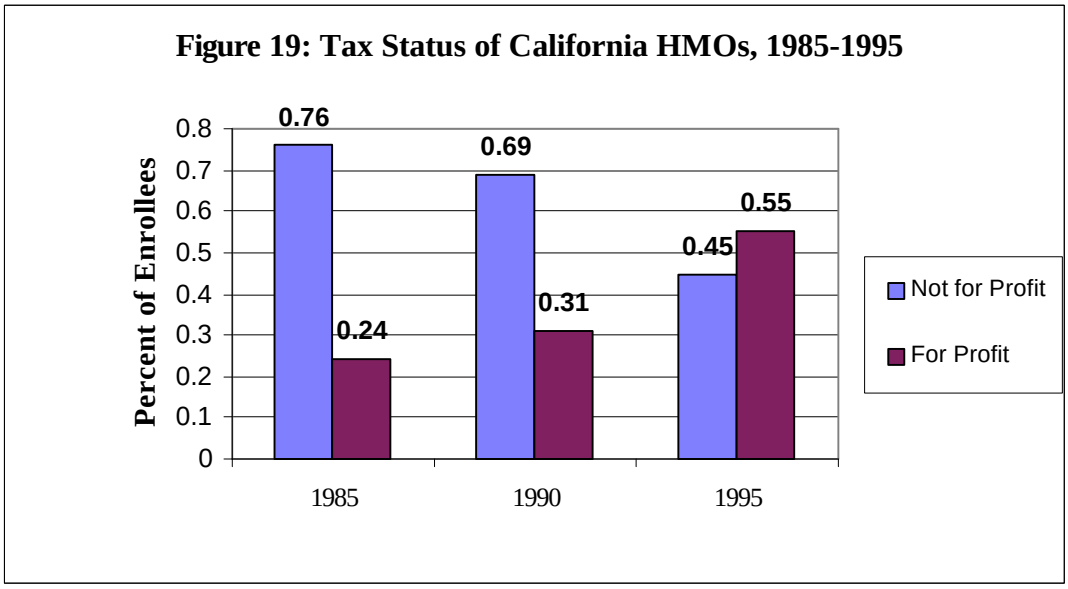
[46] Dranove, D, Durkac, A. and Shanley, M. "Are Multihospital Systems More Efficient?" *Health Affairs*, Spring 1996, p. 101.

[47] HMOs need capital to finance their past and future growth and assure that they are able to maintain broad, attractive networks; hospitals increasingly need access to private funds to remain competitive and develop infrastructures comparable to those of their for-profit competitors; medical groups and IPAs need capital to build information systems infrastructures and expand through acquisition.

[48] E. Hamburger et al., "The Pot of Gold: Monitoring Health Care Conversion Can Yield Billions of Dollars for Health Care," *Clearing House Review*(August-September 1995): 475, quoting S. Thompson, "The History of HMOs: Have They Kept Their Promise?" *California Physician*(March 1994):62.



One facet of the increasing media backlash against managed care in recent years has been the perceived negative effects of consolidation, especially as for-profit HMOs merge with non-profit ones. Critics are concerned that for-profit health care organizations will not care for vulnerable populations or the poor or uninsured as well as non-profits. As cost/price competition increases, it becomes increasingly difficult for providers to cross-subsidize care for vulnerable populations through an increase in fees charged to private and government payers or purchasers.

Studies comparing performance of for-profit and not-for-profit organizations in health care are limited, and findings vary across types of organizations and comparison factors.[49] The relative performance of for-profit and non-profit organizations appears to depend on a variety of factors, including the type of service involved, incentives built into payment systems, the role of physicians in making decisions that affect expenditures, and the market in which the organization operates.

[49] Gray, BH, The Profit Motive and Patient Care: The Changing Accountability of Doctors and Hospitals, pp. 90-110.